BLUEFIN TUNA ADDENDUM
to the
DRAFT Highly Migratory Species Fishery Management Plan

Chapter 3: ONGOING HMS MANAGEMENT: MANAGING FOR OPTIMUM YIELD

February 8, 1999

*The Addendum follows the same format and structure as the draft HMS FMP, but only includes sections of the draft FMP which have been modified in some way. Sections which are not changing at all have been indicated as such by **(STET)**, and are not included in the Addendum. The final HMS FMP will combine information from the Addendum and the draft HMS FMP.*

3.1 Healthy Stocks: Managing for F_{OY} (No change from draft FMP)

(STET)

3.2 Atlantic Tunas Fisheries Management Measures

(STET)

3.2.1 Bluefin Tuna Effort Controls

General Category

Effort controls are used in the BFT tuna fishery to affect where, when, and how (gear type) BFT are harvested for a variety of objectives. General and Angling category catch-per-unit-effort (CPUE) information is used in stock assessments, and lengthening the season is important for the collection of this data used to monitor the status of the stock. See Chapter 2 of the draft FMP and Addendum for a more detailed explanation of CPUE and the importance of scientific data collection in the western Atlantic BFT fishery. Objectives also include reducing bycatch, lengthening the season for market reasons, and addressing allocation issues (e.g., through set-asides and split seasons). For example, the temporal and spatial effort control alternatives for the General category seek to lengthen the fishing season in a category with high participation and catch rates.

Currently, all but one of the commercial and recreational Atlantic tuna permit categories are open access. The Purse Seine category is the single "closed" U.S. BFT fishery, operating under a limited access, transferable individual vessel quota (IVQ) system. While all the other categories are open access, NMFS has published a "control date" (September 1, 1994) in the Federal Register. The purpose of this control date is to advise current and future commercial participants that access to the U.S. BFT fishery may be limited at some point in the future, and that future access for entrants after the control date is not assured. NMFS has also published a concept paper on limited access for Atlantic HMS, and has held public workshops on limited access in the Atlantic tunas fisheries. The 1995 BFT Final EIS also discusses several "strawman" proposals for limited access and IVQs. There may be a renewed interest in considering some form of limited access in the BFT fishery, as other fisheries undergo limited access, restrictions on fishing effort to support rebuilding, and a narrowing of other alternatives available to new fishery participants. The effort controls discussed below should be considered in light of both open and limited access.

Currently, NMFS establishes, on an annual basis through specifications, time period subquotas, splitting General category quota (into three subquotas in 1997 and 1998). NMFS also establishes restricted-fishing days (RFDs) on which fishing for BFT by vessels in the General category is prohibited. This is intended to extend the fishing season temporally and spatially, in order to collect better scientific data for stock assessment purposes, and to increase ex-vessel prices as fish quality improves in the fall. NMFS intends to continue with this method of annual specifications to establish time period subquotas and RFDs. Input from the public, industry, NMFS' consultative parties, as well as the HMS Advisory Panel is incorporated into the annual effort control specifications for the General category.

Along with this Addendum to the draft HMS FMP, NMFS is publishing proposed annual General category effort control specifications for the 1999 fishing year. NMFS is seeking comments on the proposed specifications as well as on the draft HMS FMP and Addendum.

Spotter Aircraft

Spotter planes are used in the commercial fisheries for bluefin tuna. Planes are utilized by vessels fishing in the General, Harpoon, and Purse Seine categories to locate schools of fish and assist the vessels in the capture of the fish, by providing information on where to set nets, throw harpoons, and put out or troll lines. NMFS has received numerous comments that the use of aircraft to locate bluefin tuna is, among other things, working against the effort controls previously established for the General category and is accelerating the closure of the Harpoon category.

NMFS has, on two prior occasions, requested specific comments on ways to mitigate the impact of aircraft use on catch rates (54 FR 29916; July 17, 1989 and 61 FR 18366; April 25, 1996). Prior to 1997, NMFS elected not to regulate aircraft use in the Atlantic tuna fisheries, in part because of concerns about the enforceability of spotter aircraft regulations. Additionally, in 1996, a voluntary agreement was signed by the majority of active tuna spotters that would limit activity to harpoon vessels. NMFS recognized that the voluntary agreement warranted a trial period, but also indicated that the agency would continue to monitor the situation and would take appropriate action if necessary.

On March 4, 1997 (62 FR 9726), NMFS proposed to prohibit use of aircraft and again requested comments. On July 18, 1997 (62 FR 38487), NMFS published a final rule prohibiting the use of aircraft to assist vessels in all but the Purse Seine and Harpoon categories. In response to a lawsuit filed by the Atlantic Fish Spotters Association, the United States District Court for Massachusetts, on June 10, 1998, ordered that the prohibition on the use of spotter aircraft in assisting BFT vessels in other than the Harpoon and Purse Seine categories, as codified in 50 CFR 285.31(a)(40) be overturned, and is now void.

Fishery management concerns continue to be expressed, public testimony suggests that the numbers of aircraft and vessels have increased, and members of the public continue to raise safety issues. Therefore, NMFS is again considering action to respond to these issues. The following section describes several alternatives which NMFS may pursue in order to better understand and

manage the effects of spotter aircraft in the BFT fishery.

Alternative 1. For All Vessels Other than Purse Seine Category Vessels, Prohibit the Use of Aircraft to Assist Fishing Vessel Operators in the Location and Capture of West Atlantic BFT.

General

As mentioned above, NMFS has received numerous comments that the use of aircraft to locate bluefin tuna for General category vessels is contrary to effort controls previously established and is accelerating the closure of the Harpoon category. This alternative would prohibit the use of aircraft for BFT fishing except for assisting purse seine vessels.

The Harpoon boat category was established in 1980 based on information supplied by a small number of harpoon fishermen. They presented evidence that supported the conclusion that there was a small traditional fishery that should be segregated from the General category. The harpoon fishery could only be pursued under optimal weather and sea conditions, which allow fishermen to sight fish from the tower and pulpit. Since these conditions occur infrequently in New England, the one fish per day per vessel General category catch limit was too restrictive and hence, a separate quota and a multiple daily catch allowance was established for the Harpoon boat category.

NMFS has received comments that the use of spotter aircraft undermines the basis for the multiple daily catch allowance which was once considered necessary for the preservation of the traditional harpoon fishery. Commentors note that, with the advent of spotter planes, harpooning can be done under far less than optimal weather and sea conditions, and Harpoon category participants are able to fill category quota more quickly. Some Harpoon vessel owners apparently switch to General category vessels when the Harpoon category quota is attained and continue to use their spotter planes, thus accelerating the rate at which the General category quota (or time period subquota) and counteracting the effort controls designed to extend fishing opportunities for the General category.

Commentors have noted that maintaining the current regulations could result in continued difficulties with premature fishery closures and market gluts and could counteract the General category effort controls. Similarly, banning spotter aircraft for all but the purse seine fishery is consistent with other measures used by NMFS in recent years to ensure a wider geographical and temporal distribution of fishing activities, which contributes to the collection of the best scientific data for stock assesment purposes, and provides or increases fishing opportunities for all fishery participants. NMFS notes that use of aircraft to harvest more fish in a short period of time is inconsistent with measures to slow the fishery and improve market conditions. Data regarding closures in the General category support the conclusion that seasons have been shortened. In 1996, ICCAT adopted a recommendation prohibiting the use of spotter aircraft by purse seine vessels in the Mediterranean due to their effect of accelerating catch rates. However, in the United States, the purse seine fishery is managed under a transferable individual vessel quota program. Therefore, aircraft do not have the effect of accelerating catch in the U.S. purse seine

fishery and can assist in location schools of large fish, thus reducing discards.

Enforcement is a central issue in the regulation of the use of aircraft for the BFT fishery. Certain industry members have indicated that they are willing to work with NMFS Enforcement by providing information regarding potential violations of spotter plane regulations. Special agents with investigative training could be deployed to follow up on potential violations. In comments on the 1997 spotter plane prohibition rulemaking, the Federal Aviation Administration (FAA) indicated that the ban would not interfere with the FAA's jurisdiction, because the rule would not prevent or hinder pilots from flying since the action would prohibit vessels from using any aircraft to aid in the harvest of BFT only.

The HMS Advisory Panel (AP) considered this issue at a meeting in Warwick, Rhode Island in August 1998. The meeting was open to the public and, during the public comment period the AP heard extensive testimony from fishery participants both in favor of and against this alternative. The majority of the public comments were against the use of aircraft in the General and Harpoon categories. Commentors expressed the following reasons for banning the use of spotter aircraft: spotter planes accelerate the catch rate in both the General and Harpoon categories, both directly and indirectly; accelerated catch rates result in shorter seasons, thereby effecting both CPUE data collection and economics; planes make it easier to catch multiple fish and thus make it easier to violate catch limit regulations and highgrade; vessels operating with the assistance of planes often cause conflict on the fishing grounds; airplanes are not a traditional or historical part of the Harpoon or General categories - they only got involved extensively after there was less work spotting for swordfish in the mid-1980's; and planes can cause safety concerns, for both boats and the planes themselves, by concentrating vessels and planes in a small area. The AP itself discussed the issue extensively, and while the AP did not express a unanimous view, a strong consensus emerged in favor of banning the use of airplanes by all vessels participating the Atlantic tunas fisheries, with the exception of purse seine vessels. Several AP members reserved comment, but none spoke out in favor of plane use. The points that the AP members made in favor of banning the use of aircraft in all but the purse seine category were as follows:

- The use of spotter aircraft accelerates the catch rate in both the General and Harpoon categories, both directly and indirectly. They are a highly efficient, unregulated, unpermitted, gear type. Vessels that hire planes directly are obviously assisted, but many vessels are assisted indirectly just by seeing the planes and using them as a guide to where the fish are. This indirect or "peripheral" catch may be hard to quantify, but it exists and is significant. In addition, most fish in the Harpoon category are caught with the assistance of planes. With no planes, the Harpoon category would last much longer, and the Harpoon category fishermen would not switch over to a General category boat (to further accelerate the catch in the General category) as soon.

- Because the use of spotter aircraft accelerates the catch rate, their use compromises the collection of good CPUE data, which is then used in the stock assessments. Aircraft cause the catch to be spatially and temporally concentrated, less random in nature, and more affected by short term and localized factors which can result in unreliable or unusable

CPUE data for stock assessments.

- Planes cause an increase in effort. When fish are hard to find or are far offshore during parts of the season, planes can find them very easily. Vessels that normally would not even try in such conditions are then directed to these fish by the planes.

- The use of spotter planes adds to a vessel's potential to violate regulations and land multiple fish per day in the General category, to highgrade and discard low quality fish.

- Pilots do not have a vested interest in the fishery. They are essentially an unpermitted gear type, and their activity is not monitored or controlled.

- The use of spotter aircraft is a safety concern. The "rules of the road" for navigation and safety don't seem to apply when boats are racing after a plane.

Ecological Impacts

This alternative would have minimal impact on stock rebuilding as whatever quota is in place would most likely be harvested with or without the use of spotter aircraft. Spreading the General category fishery out, both temporally and geographically, would result in better data being collected and used in stock assessments, which would have positive ecological affects as there would be a better understanding of the status of the stock and more informed management decisions could be made. As for discards, it is unclear what effect prohibiting the use of aircraft would have on the catch of BFT too small to retain. Some comments indicate that discards would be reduced because harpooners not relying on aircraft may be more selective. However, some commenters argue that the discards may be increased because harpooners are not as accurate in finding retainable fish as are spotter pilots. There is little reliable information currently available to determine which outcome is more likely to occur.

Social and Economic Impacts

Spotter aircraft have largely been employed in the purse seine and harpoon fisheries, and to a much lesser extent in the General and Angling categories. Anecdotal evidence suggests that each spotter pilot assists in the harvest of 15 Harpoon Category fish per season and that spotter pilots receive 25 percent of a vessel's revenues from sale of bluefin. Using 1996 figures (average weight of Harpoon category catch and average price per pound), prohibiting the use of spotter aircraft in the Harpoon category would thus reduce average gross revenues for pilots by approximately $12,000. However, in the General category, the daily catch is limited to one bluefin per vessel. Therefore, prohibiting the use of spotter pilots in the General category would be expected to reduce average gross revenues for pilots by considerably less than $12,000.

Because the full BFT quota would in all likelihood be taken even without the aid of spotter aircraft, gross revenue lost to pilots would accrue to vessel operators. No information

available to NMFS suggests that the pilots depend solely on bluefin tuna spotting for their livelihoods. This alternative may not have a significant economic impact, if one views the fishery in the context of several thousand small business entities, including vessel operators and shoreside support services. The FEIS for BFT provides information on direct and indirect full time equivalent (FTE) employment in certain portions of the BFT fishery. An estimated total of over 1,200 direct and indirect FTE jobs are attributed to the BFT fishery. On a full-time equivalent basis, less than two percent of small business entities would be affected by this alternative (Final Environmental Impact Statement, July 20, 1995, p. 129, table 3.16).

Anecdotal information suggests the existence of some unsafe practices, such as near misses with more than one aircraft flying at low altitude or aircraft attracting too many vessels to a the same area. For example, on April 9, 1997, two single-engine planes carrying spotters of spawning herring collided over Prince William Sound, Alaska, killing two individuals in one of the planes.

Conclusion

This alternative is rejected at this time. NMFS believes more information on the use and effects of spotter aircraft in the BFT fisheries should be reviewed before taking further action. NMFS will continue to seek the input of the HMS Advisory Panel in further evaluation of management alternatives regarding spotter aircraft. See conclusion for the preferred alternative (Alternative 4).

Alternative 2. For All Vessels Other than Harpoon and Purse Seine Category Vessels, Prohibit the Use of Aircraft to Assist Fishing Vessel Operators in the Location and Capture of West Atlantic BFT.

General

NMFS implemented this measure though a final rule effective July 1997. However, as mentioned previously, the United States District Court for Massachusetts ordered that the prohibition be overturned effective June 10, 1998.

Despite the Court's ruling, NMFS continues to believe that extending the season for the rod-and-reel fisheries helps ensure the collection of the best available data for the asessment of the stock as well as providing opportunities for all fishery participants. To this end, NMFS has taken regulatory actions in previous years to extend the BFT season for the General and Angling categories. However, data from the harpoon and purse seine fisheries have not been incorporated into any of the currently usable catch-per-unit-effort indices, therefore the effect of spotter aircraft accelerating catch rates in these fisheries is less significant.

While exempting harpoon as well as purse seine vessels would mitigate adverse impacts on spotter pilots, there would be difficulties in enforcing the ban when the Harpoon and General category fisheries are operating concurrently. Harpoon gear is also authorized for the General category, but the exemption would only apply to vessels permitted in the Harpoon category.

Ecological Impacts

This alternative would have effects that are primarily economic and/or administrative in nature.

As spotter pilots are able to determine the approximate size class of a school of bluefin, prohibiting the use of spotter aircraft in the General category may increase the potential for catching undersized fish in the handgear categories and could lead to increased discards. It is unclear what effect prohibiting the use of aircraft would have on the catch of BFT too small to retain. Some comments indicate that discards would be reduced because harpooners not relying on aircraft may be more selective and because they will be less apt to strike at fish they cannot see well (as they may with spotter pilot assistance). However, some commenters argue that the discards may be increased because harpooners are not as accurate in finding retainable fish as are spotter pilots. There is little reliable information currently available to determine which outcome is more likely to occur. In recent years, less than 10 percent of the General category quota has been taken with harpoon gear, thus the potential for increased discards is limited.

Social and Economic Impacts

The analysis in effort control Alternative 1 includes a description of the potential social and economic impacts of this alternative. As mentioned above, exempting harpoon as well as purse seine vessels from a spotter aircraft prohibition would mitigate adverse impacts on spotter pilots.

Conclusion

This alternative is rejected at this time. NMFS believes more information on the use and effects of spotter aircraft in the BFT fisheries should be reviewed before taking further action. NMFS will continue to seek the input of the HMS Advisory Panel in further evaluation of management alternatives regarding spotter aircraft. See conclusion for the preferred alternative (Alternative 4).

Alternative 3. Reintegrate the Harpoon and General Categories

Reintegration of the Harpoon category with the General category would simplify regulations and establish parity between the two categories insofar as the catch limit would be one bluefin greater than 73" (or 81", if implemented) per vessel per day for all handgear types. It has been alleged that fishing activities associated with spotter aircraft require that multiple landings be attempted, potentially through the practice of at-sea transfers. The reduction in the daily catch limit for the harpoon sector would diminish the cost-effectiveness of spotter aircraft assistance and thus could potentially reduce their use in the fishery.

Ecological Impacts

This alternative would have effects that are primarily economic and/or administrative in nature.

Social and Economic Impacts

The social and economic impacts from this alternative would mostly be felt by the participants in the Harpoon category who would be limited to the one fish per trip limit in the General category. Some vessels in the Harpoon category land over 25 fish per year. The more successful vessels in the General category land similar numbers of fish, so the impact may not be great. Many vessel owners in the Harpoon category also own another vessel in the General category, and when the Harpoon category closes, they fish in the General category on their second vessel. This alternative would eliminate the need for a second vessel, and could impact the revenues of those owners/operators who have multiple vessels. This is hard to assess, however, as these vessel owner/operators could participate full time in the General category and potentially make up for the income lost from the Harpoon category vessel.

Conclusion

This alternative is rejected at this time. For those who use exclusively harpoon gear, the weather dependency of using harpoon gear still warrants the multiple catch limit in the Harpoon category. NMFS will continue to seek the input of the HMS Advisory Panel in further evaluation of management alternatives regarding spotter aircraft. See conclusion for the preferred alternative (Alternative 4).

Alternative 4. No action (Status Quo) **[PREFERRED ALTERNATIVE]**

As mentioned above, maintaining the current regulations could result in continued difficulties with premature fishery closures and market gluts, and could counteract the General category effort controls. In addition, safety concerns would not be addressed. The traditional harpoon fishery can only be pursued under optimal weather and sea conditions and has therefore been provided with a multiple daily catch allowance. Using aircraft in the harpoon fishery is not entirely consistent with the rationale for a higher catch limit and optimal weather conditions needed to sight fish from the tower and pulpit.

As mentioned above, the HMS AP considered this issue at a meeting in Warwick, Rhode Island in August 1998. The meeting was open to the public and, during the public comment period the AP heard extensive testimony from fishery participants both in favor of and against this alternative. While the vast majority of the public comments were against the use of aircraft in the General and Harpoon categories, some did speak in favor of their use. The reasons they gave for allowing the use of spotter aircraft in all categories included: spotter planes do not significantly accelerate the catch rate–it is the sheer number of participants in the fishery that accelerate the catch rate; spotter aircraft and pilots have contributed to science through the aerial survey; and spotter pilots allow vessels to select for larger fish, resulting in fewer discards. Those defending

the use of spotter aircraft also expressed concern that this issue was being decided by a popularity contest and that just because the majority wants aircraft banned does not mean it is a legally defensible action.

Ecological, Social, and Economic Impacts

The impacts of the use of spotter aircraft in the BFT fishery are described above.

Conclusion

As evidenced by the AP's consensus, NMFS continues to believe that the use of spotter planes in the General and Harpoon categories is a problem in the bluefin tuna fishery and that the use of spotter planes impedes the collection of important scientific information about this fishery. NMFS maintains that this remains true, even though the western Atlantic BFT fishery is no longer a "scientific monitoring" quota under the 1998 ICCAT Recommendation on western Atlantic BFT rebuilding. While no longer a "scientific monitoring" quota by name, the recommendation does require that the United States provide the best available data for the assessment of the stock by the SCRS. For these reasons, NMFS is currently developing a proposed rule to address the issue of spotter planes in the bluefin tuna fishery, and intends that a final rule would be completed prior to the commencement of the next General and Harpoon category fishing seasons, June 1, 1999. NMFS will consider information gathered during the development of this draft FMP, including comments from AP members and the public during the scoping and other public comment processes. These comments were very helpful; however, NMFS has determined that further deliberation is necessary prior to issuing a proposed rule.

Angling Category

Alternative 5. Establish a "School Reserve" Category. **[PREFERRED ALTERNATIVE]**

This alternative would establish a "school reserve" category which could be used in the instance of overharvest in the school category. This alternative could be implemented with any rebuilding and allocation alternative, so long as the allocation alternative provides for a school BFT fishery.

General

For school size class BFT, ICCAT limits west Atlantic BFT fishing nations to eight percent of their national quota (See discussion below and in Chapter 2). For the preferred rebuilding and allocation alternatives, this would be 111 mt for the United States. Because of high, as well as highly variable, catch rates, the Angling category can easily harvest and exceed this quota. The United States could be held accountable for such an overage, and those school fish could be deducted from the U.S. quota in the future.

The 1998 ICCAT Recommendation on western Atlantic BFT rebuilding requires that the

catch of school BFT be limited to no more than 8 percent by weight of the total U.S. quota over each 4-consecutive-year period. NMFS proposes to implement this provision through the establishment of the school bluefin reserve specified below and through annual adjustments to the school BFT landings and reserve categories as necessary to meet the ICCAT requirement. Given the 4 year accounting period, NMFS proposes that adjustments for estimated overharvest or underharvest of school BFT not be restricted to automatic carryover between fishing years. Instead, flexible adjustments would be made to enhance fishing opportunities and the collection of information on a broad range of BFT size classes, provided that the 8 percent landings limit is met over the applicable 4 year period.

A "school" reserve of approximately 20 mt (actual tonnage would be calculated from a percentage (18.5 percent of school allowance, which would be 21 mt), as with other allocations) would reduce the chances of the United States exceeding the eight percent tolerance, as the school reserve would not be allocated at the start of the season, but would be held in reserve as a buffer against an overage. If an overage did not occur, the school reserve could be allocated to the recreational fishery later in the year or carried over and allocated the following year, consistent with the relevant ICCAT recommendations.

Ecological Impacts

This alternative would have positive ecological impact as it would help prevent the United States from exceeding its quota of school size class BFT.

Social and Economic Impacts

As this alternative would not increase or decrease the overall quota or the Angling category quota, it would not have any social or economic impacts as compared to the status quo. The Angling category would still be allowed to harvest its full quota. One might argue that the Angling category benefits from exceeding its quota, but if overharvests are subtracted from the following year's quota, quota overages do not benefit any category.

Conclusion

This is a preferred alternative. Along with the 1998 ICCAT recommendation which allows four years to balance the 8 percent tolerance, establishing a reserve of school BFT could provide more flexibility in managing the Angling category fishery, and would help prevent the United States from exceeding its quota of school BFT, which would prevent excessive fishing on the stock as well as reductions in future years' school BFT quota. This alternative would not have negative social or economic impacts.

3.2 Yellowfin Tuna Management Measures (No change from draft FMP)

(STET)

3.3 North Atlantic Swordfish Management Measures (No change from draft FMP)

(STET)

3.4 Atlantic Shark Fisheries Management Measures (No change from draft FMP)

(STET)

3.5 Monitoring, Permitting, and Reporting Alternatives (No change from draft FMP)

(STET)

3.6 Fishing Year

Alternative 1. Status Quo.

This is the no action alternative. Under this alternative, the fishing year for sharks and Atlantic tunas would remain January 1 through December 31. The swordfish fishing year would remain June 1 through May 31. For Atlantic tunas, the General and Harpoon categories do not

open until June 1, and the Purse Seine category does not open until August 15, but the "fishing year" ends December 31 for these categories as well.

Ecological Impacts

The shark fishing year is currently split into two semi-annual seasons, January 1 through June 30 and July 1 through December 31. The quota is generally split evenly between the semi-annual seasons, although the Assistant Administrator for Fisheries may deduct quota overages and add quota underages from one semi-annual season from the quota for the following semi-annual season, within the fishing year. Overages or underages are not carried across fishing years.

The North Atlantic swordfish fishing year is currently split into two semi-annual seasons, June 1 through November 31 and December 1 through May 31. The longline/harpoon quota is split evenly between the seasons with an annual Incidental quota and an annual driftnet quota. The AA may deduct quota overages and add quota underages to the following fishing year or semi-annual season, whichever is reasonable (i.e., deduct first semi-annual overage from second semi-annual season, deduct second semi-annual season overage from following fishing year). SCRS assessments are completed and new TAC and other measures are recommended by ICCAT in November, allowing time to implement measures prior to the start of the following fishing year in June 1. NMFS is proposing a time/area closure for swordfish longline fishermen in the Florida Straits for July-September. Therefore, those vessels will be able to take advantage of the beginning of the semi-annual season (June) and if there is no closure, they will be able to fish in that area for the end of the semi-annual season (October, November).

The fishing year for Atlantic tunas begins January 1, although the General and Harpoon categories for BFT open June 1, and the Purse Seine category for BFT opens August 15. The Angling and Incidental categories do open January 1, and the ICCAT schedule makes it difficult to implement ICCAT recommendations by the start of the fishing year.

Economic Impacts

This alternative is the status quo. Without sufficient time to implement ICCAT recommendations before the start of the fishing year for some fisheries, it can be difficult for fishermen to plan, and participate in the process of implementation of ICCAT recommendations.

Conclusions

This alternative is rejected. The fishing years for the various fisheries start at various times, causing confusion when referring to fishing years, especially those managed through ICCAT. In addition, with the fishing year for Atlantic tunas beginning January 1, there is currently not enough time to implement ICCAT recommendations in time for the following fishing year after the Commission meeting in November.

Alternative 2. Fishing Year Begins June 1 and Ends May 31 for Tunas and Swordfish; Fishing Year Begins January 1 and Ends December 31 for Sharks. **[PREFERRED**

ALTERNATIVE]

This alternative makes one change from the status quo: switching the beginning of the fishing year for Atlantic tunas from January 1 to June 1. Each November, the United States participates in negotiations at ICCAT to manage the tuna, swordfish, and billfish fisheries. In the following months, NMFS issues regulations or takes other action to implement ICCAT recommendations. In many instances, it is necessary to conduct analyses, draft regulations and accompanying documents, and hold a series of public hearings, before an ICCAT recommendation can be implemented. It is difficult to complete those tasks thoroughly in sufficient time for fishery participants to be aware of how the regulations may change for the upcoming fishing year, particularly if the fishing year commences almost immediately after the ICCAT meeting (January 1). This alternative would shift the start of the fishing year for tunas to June 1, giving both NMFS and fishery participants adequate time to develop and consider conservation and management measures that will implement ICCAT recommendations effectively.

In order for this alternative to be implemented, a separate quota would be necessary for the one-time "bridge period" of January 1-May 31, 1999. NMFS proposes to use the 1998 underharvest from the Angling and Incidental categories for the bridge period, when only the Angling and Incidental categories are open (see Table 2.10 of the Addendum, Column F). Any underharvest from the bridge period would be added to the quota for the 1999 fishing year.

Ecological Impacts

This alternative is not expected to have biological impacts. It would not necessarily change any time of the year or areas that fish are caught.

Social and Economic Impacts

This alternative is expected to have beneficial social and economic impacts on participants in the Atlantic tunas fisheries. This alternative will allow fishery participants more time to plan their fishing activities, and thus should lend more predictability to fishing-dependent business and income.

Conclusion

This alternative is preferred, based on the management considerations outlined above.

3.7 Safety of Human Life At Sea (No change from draft FMP)

(STET)

3.8 Scientific Data and Research Needs (No change from draft FMP)

(STET)

3.9 Development of Fishery Resources (No change from draft FMP)

(STET)

3.10 Total Allowable Level of Foreign Fishing (TALFF) (No change from draft FMP)

(STET)

3.11 Relationship to International Agreements, Applicable Laws and Other Fishery Management Plans (No change from draft FMP)

(STET)

3.12 Framework Adjustment Regulatory Procedure (No change from draft FMP)

(STET)

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